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NOTICE OF ALLOWANCE AND FEE(S) DUE

24114 7590 01/16/2009
LyondellBasell Industries
3801 WEST CHESTER PIKE
NEWTOWN SQUARE, PA 19073

EXAMINER

NGUYEN, HUY TRAM

ART UNIT PAPER NUMBER

1797

DATE MAILED: 01/16/2009

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNITY DOCKET NO.
 CONFRMATION NO.

 10/552.853
 10/12/2005
 Rainer Karer
 LU 6098 (US)
 2604

TITLE OF INVENTION: DISCONTINUOUS METERING OF CATALYSTS AND PROCESS AUXILIARIES INTO A GAS-PHASE FLUIDIZED-BED REACTOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/16/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further coindicated unless corrected maintenance fee notification	form should be used for orrespondence including to below or directed oth ons.	or tran ig the l ierwise	smitting the ISSU Patent, advance of in Block 1, by (a					nould be completed where correspondence address as rate "FEE ADDRESS" for
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LyondellBasell 3801 WEST CHE NEWTOWN SQU	STER PIKE			I h Sta adc trai	aroby cortify that th	ie Good	c) Transmittal is being	deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
								(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	₹	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/552,853	10/12/2005			Rainer Karer		LU 6098 (US)		2604
TITLE OF INVENTION: REACTOR	DISCONTINUOUS M	ETERI	ING OF CATALY	STS AND PROCESS A	UXILIARIES INT	O A G	AS-PHASE FLUIDIZ	ED-BED
APPLN, TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	04/16/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	1			
NGUYEN, HI	UY TRAM		1797	208-I46000	-			
PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	ndence address (or Cha 122) attached. atton (or "Fee Address" or more recent) attach TD RESIDENCE DATA ss an assignee is identi in 37 CFR 3.11. Comp	nge of 6 ' Indica ed. Use	Correspondence tion form of a Customer E PRINTED ON		o 3 registered pater tively, le firm (having as a agent) and the nam orneys or agents. If printed. pp) patent. If an assign assignment.	memb es of u no nan	er a 2p to p to see is 3	ocument has been filed for
Please check the appropria	ue assignee category or	catego	ries (will not be pr	inted on the patent):	Individual 🚨 C	orporati	ion or other private gro	up entity Government
4a. The following fee(s) are submitted: Itsue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				o. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereb overpayment, to Dep	rd. Form PTO-2038	is atta	iched. required fee(s), any de	
 Change in Entity Statu a. Applicant claims 	SMALL ENTITY statu	s. See :	37 CFR 1.27.	b. Applicant is no los	nger claiming SMA	LLEN	ПТҮ status. Sec 37 Cl	R 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeends of the United Sta	iired) v tes Pate	rill not be accepted int and Trademark	from anyone other than Office.	the applicant; a reg	istered :	attorney or agent; or th	e assignee or other party in
Authorized Signature _					Date			
Typed or printed name				Registration No.				
This collection of informat an application. Confidenti- submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231.	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur rginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C. USPT den, sh	11. The informatic 122 and 37 CFR O. Time will vary ould be sent to the SEND FEES OR (on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by stimated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	the pub minute omment Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tin nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	NG DATE FIRST NAMED INVENTOR		CONFIRMATION NO.		
10/552,853	10/12/2005	Rainer Karer	LU 6098 (US)	2604		
24114 7.	590 01/16/2009		EXAMINER			
LyondellBasell Industries 3801 WEST CHESTER PIKE			NGUYEN, HUY TRAM			
			ART UNIT	PAPER NUMBER		
NEWTOWN SQU	ARE, PA 19073	1797				

DATE MAILED: 01/16/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 637 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 637 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/552.853 KARER ET AL. Notice of Allowability Examiner Art Unit HUY-TRAM NGUYEN 1797 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the amendment on November 17, 2008. The allowed claim(s) is/are 1-5,8-13 and 18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

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Art Unit: 1797

Application/Control Number: 10/552,853

DETAILED ACTION

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shao-Hua Guo on January 13, 2009. The application has been amended as follows:

Claims 14, 15, 16, 17 and 19 which are drawn to apparatuses have been cancelled.

2. The following is an examiner's statement of reasons for allowance:

Regarding Claim 1, the closest prior art, Calvert et al. (US Patent No.

3,876,602) reference discloses the method as claimed in claim 1 except for the first fluid stream is introduced discontinuously for a period of from 0.5 to 60 s and the catalyst is metered in after a delay of from 0.5 to 3 s after commencement of the introduction of the first fluid stream. Calvert et al. reference discloses the steps of metering catalyst into the capillary tube **before** the first fluid stream is introduced.

Claims 2-5, 8-13 and 18 directly or indirectly depend on Claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/552,853

Art Unit: 1797

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY-TRAM NGUYEN whose telephone number is (571)270-3167. The examiner can normally be reached on MON-THURS: 6:30 AM - 5:00 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTN 1/13/09

/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1797